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To find life beyond.

As Approved
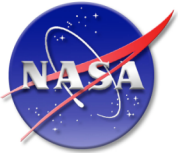
Competition Working Group Recommended Actions

NASA Operations Council

February 8, 2005

**One TEAM, One JOURNEY, One NASA…**

"Building the Future Together"

Why are we here?

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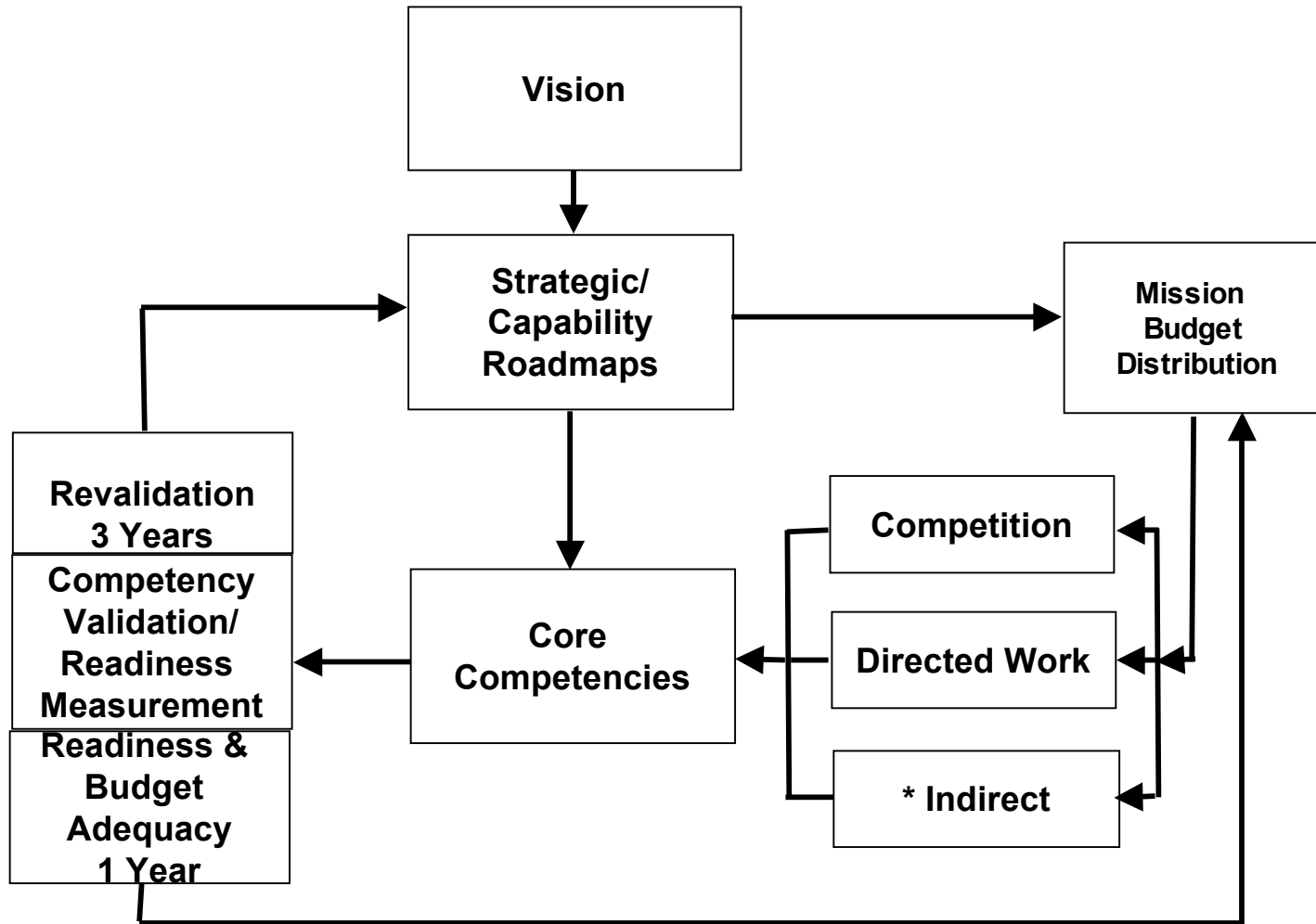To extend life to there,
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In response to Action 1d of the One NASA Recommendations that identified competition between centers as a major issue in NASA's accomplishment of mission objectives.

- Provide information on the use of competition within NASA.

- Accept a set of principles for adoption by the Operations Council and Strategic Planning Council that clearly reflects Agency business strategy and guides the use of competition and directed work transactions inside NASA.

- Approve the implementation of 6 recommended actions to optimize our use of competition and directed work to accomplish mission objectives.
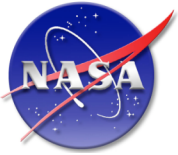
- Accept the structure for implementation and assessment.
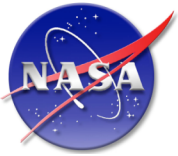
A Strategic Framework for Operating

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* Headquarters and Center Indirect

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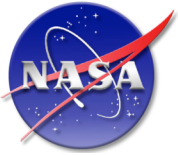*To extend life to there,*
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Scope and Context

CWG Addresses

- Competition between NASA organizations for NASA budget
- The ability of NASA organizations to compete fairly and openly
- The impact of competition and directed work on collaboration and information sharing

CWG Does Not Address

- Competitions between members of industry for NASA Budget and operating under the Federal Acquisition Regulations

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Approach

- **Formed diverse team representing Mission Directorates and Centers**

- **Three sub-teams each addressing separate areas**
  - **Science and Technology**
  - **Programs and Projects**
  - **Infrastructure**

- **Data collection through internal interviews and external benchmarking**

- **Three team reports were integrated into these recommended actions**
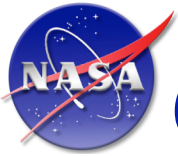
Competition Working Group

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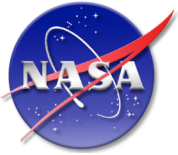|			
Michael Abreu	Systems Int.	Jack Kaye	Science
Erik Antonsson	JPL	Mark Loomis	ARC
James Bilbro	MSFC	Peg Luce	GSFC
Gary Cox	GSFC	John Mankins	Exploration
Clay Durr	One NASA	Bruce Manners	GRC
Vanessa Ellerbe	JSC	Steve Miley	Space Ops
Orlando Figueroa	Science	Steven Pearson	One NASA
Peter Friedland	ARC	Kory Priestley	LaRC
Sanjay Garg	GRC	Herb Schlickenmaier	Aeronautics
Barry Geldzahler	Science	Susan Shockcor	LaRC
Carol Grunsfeld	Inst. and Mgmt.	Johnny Stephenson	One NASA
Michael Hess	JSC	Dale Thomas	MSFC
Robbie Hood	MSFC		

NASA

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Findings

1. **Decisions on the usage of competition and directed work are based on widely varied philosophies and often have no clear linkage to Agency strategy**

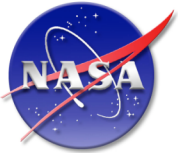|	**COMPETITION**	**DIRECTED WORK**
PROS	Innovative ideas Cost effectiveness	To leverage and build on existing capability Promotes information sharing and collaboration
CONS	May impede collaboration and information sharing Can promote winner take all mentality	Can result in a sense of entitlement May restrict infusion of new ideas

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Findings

2. **Rules for competition**
   - **Vary between organizations**
   - **Are not published or generally understood**

3. **There is a lack of uniformity regarding the definition of capability and competency within the Agency**

4. **The results and rationale for individual competitions**
   - **Are frequently not communicated to the workforce**
   - **Informal competitions (project placement and resource prioritization decisions) are the least understood**

5. **Inter-center competition**
   - **Inhibits collaboration between organizations**
   - **Frequently results in underutilized capability**
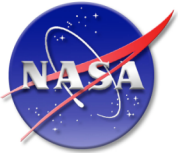   - **When based on cost alone is unfair due to G&A rate disparities**

CWG Summary -
Goals and Results

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1. **To provide a recommended set of Principles for Agency-wide use in conducting competition and directed work transactions.**
   - **Recommended Action 1 - Publish a NASA policy that establishes Principles of Competition (draft principles attached)**

2. **Communicate the rules of operation that each organization will use to assure fair and open competitions and directed work transactions.**
   - **Recommended Action 2 - Each organization will publish its rules and processes for operation (using CWG template)**
   - *The LDP will explore key messaging and options for effectively communicating these policies and rules throughout NASA. This plan may augment current strategies while working in concert with One NASA.*

3. **Reinforce ongoing actions to maintain NASA's core competencies and promote the increased use of collaboration**
   - **Recommended Action 3 – Develop Directed work targets**
   - *CWG identified linkages between this study and the Core Competencies study and developed a potential strategic framework for NASA business operations*
   - *The CWG (in collaboration with NASA leadership development classes) recommendations for techniques to measure Competency readiness (Competency Readiness Level) were provided to the Advanced Planning and Integration Office for consideration.*
   - *Grounded on CWG principles, the LDP will develop operational business models and best practices that illustrate NASA's approach and potentially highlight gaps.*

4. **Increase the competitive success of NASA organizations**
   - **Recommended Actions 4 & 5 – Increase IR&D/B&P budgets and NASA's access to outside work**
   - **Recommended Action 6 – Address the disparities in content among Center overhead rates**
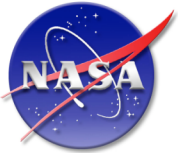
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Recommended Actions

1. **Adoption of Principles and Policy. To assure that the Agency's use of competition and directed work clearly follow Agency business strategy, develop and publish a NASA policy that establishes a set of principles and accountabilities to guide competition and directed work transactions inside NASA. Revise Agency documentation including:**
   - **Revise the Strategic Management Handbook regarding the use of directed work and competition.**
   - **Revise the Project Management Handbook to consider competition and directed work**
   - **Accountability: ADA/Systems Integration**

Recommended Principles to Guide Competition (as proposed)

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When to Compete:
- In discovery based science and technology development, freely compete ideas inside and outside the government.
- To create new capability or to place new programs and projects where no demonstrated in-house capability currently exists, compete for ideas across NASA
- Use competition to augment, sharpen and validate NASA's in-house core competencies and capabilities

When not to Compete
- Minimize competition among NASA organizations where "best in class" core competencies or capabilities have been demonstrated and recognized
- When the cost of competition exceeds the potential benefits or isn't in the strategic interest of the Agency
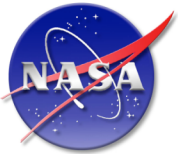
Use of Directed Work
- Use directed work to leverage and sustain unique, mission relevant competencies and capabilities that may not be fully supported by current projects
- Use directed work to achieve "best value" where in-house, Mission relevant "best in class" competencies and capabilities have been demonstrated

Validation of results from Directed work assignments
- Validate and demonstrate through periodic peer review that the work and competencies resulting from directed work are of high quality and considered "best in class"

Strive for collaboration, information sharing and fairness in all competition and directed work transactions
- All formal and informal competitions and directed work decisions should encourage and reward appropriate collaborations between centers and organizations.
- Assure an unbiased selection process in all work placement transactions including relevant selection criteria to assure best value, peer/expert review panels and assurance that reviewers and selection officials are not benefiting from results.
- Maintain openness and full communication regarding rules, processes, decisions and outcomes pertaining to all formal and informal competition and directed work transactions.

Recommended Principles to Guide Competition (as revised*)

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- Use competition to augment, sharpen and validate NASA's in-house core competencies and capabilities

When not to Compete
- Minimize competition among NASA organizations where "best in class" core competencies or capabilities have been demonstrated and recognized
- When the cost of competition exceeds the potential benefits or isn't in the strategic interest of the Agency

Use of Directed Work
- Use directed work *as needed* to leverage and sustain unique, mission relevant competencies and capabilities that may not be fully supported by *competitively won work*
  - *Strategically use directed work assignments where in-house, Mission relevant "best in class" competencies and capabilities have been demonstrated*
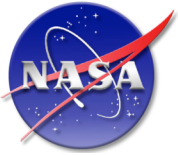
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* Reflects revisions proposed by and under consideration by NASA Leadership

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Recommended Actions

2. **Communication of Principles and Policy. All NASA organizations that have accountability for budget distribution and/or work assignment shall evaluate their use of competition and directed work against the adopted Principles and Policy and publish their business rules for implementation and operation.**

   - **Accountability: Mission Directors, AA/Institutions and Management, Offices managing Corporate G&A, Education**

   Steps:

   Determine the current dollar magnitudes of competed and directed work managed by the organization

   Analyze current rules and practices that govern competition and directed work transactions and compare to the Adopted Principles and Policy

   Revise current business rules and practices as appropriate to implement the Adopted Principles and Policy

   Publish the business rules and processes that will guide future operations to the NASA workforce
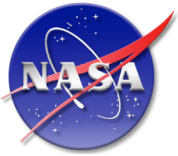
Recommended Actions

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3. ~~Directed work targets. Develop directed work targets based on Agency defined core competencies to develop, sharpen and maintain those competencies and critical capabilities established at each center (pre-Aug 1, 2004 Space Science Enterprise model an alternative)~~
   - Accountability: ADA/Systems Integration [DELETED PER OPS COUNCIL 2/8/05]

4. Competitive practices. To increase the competitive success of NASA organizations, establish B&P and IR&D budgets and proposal preparation capabilities at centers that are consistent with normal business practices
   - Accountability: Center Directors, Mission Directorates

5. External business opportunities. Enhance NASA's external business development opportunities by: a) Identify and implement mechanisms that allow full cost funding from non-NASA sources (i.e. NSF, NIH, etc) and, b) encourage and stimulate the use of NASA facilities (streamlined Space Act process)
   - Accountability: Chief Scientist

6. Overhead rate review. a) Identify and address the disparities in content among Center OH rates. Develop clear and consistent rules for the calculation and analysis of overhead rates at all Centers. b) Develop methods for strategically important but under-utilized facilities.
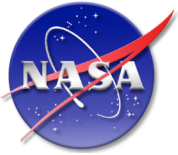   - Accountability: CFO, Institutions and Management

A Strategic Framework for Operating

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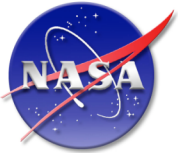*To find life beyond.*

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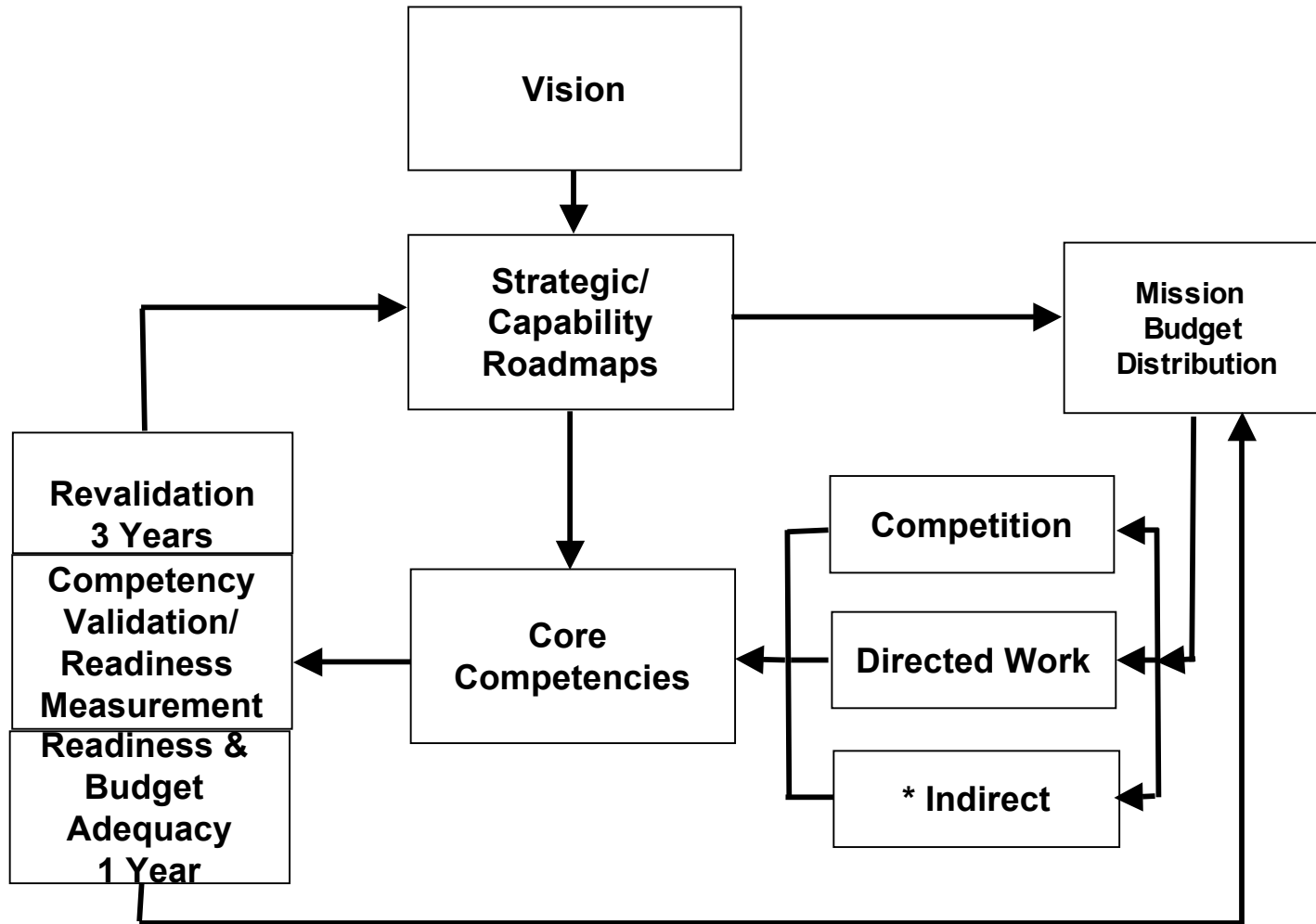
Schedule

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- **CWG Established**   **4/9/04**

- **CWG Kick-off Workshop**   **5/4/04**

- **Final team Reports**   **6/25/04**

- **Integrated CWG Recommendations**   **7/20/04**

- **Begin Implementation activities (APIO)**   **8/04**

- **Incorporate inputs from 8/20 Transformation Dialogue**   **9/9/04**

- **Debriefings with Leadership team**   **11/04**

- **Brief Operations Council (initial)**   **11/04**

- **Brief Operations Council (Final)**   **2/05**

- **Strategic Planning Council**   **TBD**

- **Final Report**   **4/05**

- **Implementation of Approved Actions**   **Ongoing**
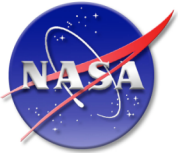
- **Operations Council Status Review**   **5/05**

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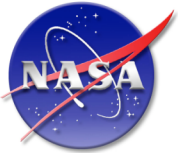*To extend life to there,*
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Backup

Definitions

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- **Formal Competition**
  - **A Formal bid process with an announcement and evaluation between NASA organizations or between NASA organizations and outside organizations**
- **Directed work and informal competition**
  - **Programs, projects, infrastructure or investment resources that are directed to a NASA Center or organization without a formal competition. (The CWG found that that a significant amount of NASA's annual budget is directed from Headquarters to the Centers – i.e. transferred annually to the Centers without formal competition)**
  - **Decisions around the POP or C of F budget processes that result in down selection from competing investment ideas.**

An Agency-Wide Metric to Measure Readiness

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Competency Readiness Level
(BEP 12)

1. **Identification of Need**

2. **Early Discovery**

3. **Early Collaboration**

4. **Early Tool and Process Development**

5. **Demonstrate Capability Potential**

6. **Tool and Process Integration**

7. **Demonstration**

8. **Proven Capability**

9. **Mature and Readily Available**